



CASE STUDY: DYNAMIC AD INSERTION AT STV

Find out how Yospace enabled Scotland's leading commercial free-to-air broadcaster, STV, to launch their simulcast service with monetisation built-in.

THE CHALLENGE

STV is the leading commercial free to air broadcaster in Scotland. As part of the ITV network it broadcasts some of the most popular programming in the UK, from Coronation Street and Downton Abbey to The X Factor and live coverage of the 2014 FIFA World Cup. As well as broadcasting in Scotland it also provides a local television channel for Glasgow, with STV Edinburgh launching in January 2015.

STV has been providing an online VoD service for some time, through its STV Player. The company was keen to launch a live streaming service, but only if it could develop a clear and identifiable revenue stream from it.

"Screen fragmentation is inevitable when you deliver to multiple platforms," said Andrew Morris, Director of Operations at STV. "The major broadcasters are all now delivering live streams online: the challenge has always been to monetise them. A live stream containing non-replaced ads has no meaningful trading model to work with" he explained. "Removing the broadcast adverts and replacing them dynamically with adverts served from our ad server, allows us to trade in a traditional VoD manner, using the CPM pricing model"

With the 2014 FIFA World Cup approaching, STV recognised the potential for huge online audiences. It needed to develop a solution which would provide distinct online advertising revenues, in an architecture which could support a potentially very large number of simultaneous users.

It needed a system which would seamlessly and dynamically insert commercials into each of the live streams, replacing the broadcast spots as required. The system needed to be flexible enough to manage breaks in each format intelligently, using in-house marketing material to make up break durations if required. It should also be capable of blacking out content for which STV did not have the online rights for any given category of device.

To minimise operational costs, all this needed to be done in a fully automated package integrated with

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the necessary parts of STV's broadcast and online streaming infrastructure – and in particular the Grass Valley Colossus playout automation system – with the Videoplaza online advertising system, and with Brightcove video management system.

Most important, the solution needed to be based on open standards. "We needed integration with Brightcove, but we also wanted compatibility with other online platforms," said Alistair Brown, CTO of STV. "We did not want to get locked in to any particular solution or vendor. The system had to be future-proof."

THE SOLUTION

Following an extensive technical evaluation of the available vendors it became clear that, for a number of reasons, the solution from Yospace stood out.

The Yospace solution is unique in its ability to offer tight integration with the broadcast playout automation. The Yospace server knows precisely which frame a commercial break begins or ends on, and conditions the live stream to allow its distributed delivery system to swap to alternative content on a per-user basis. The playback experience is not interrupted, so there is no visual or audible disturbance.

Other advertising replacement systems depend upon downloading the replacement content to the receiving device in advance, then sending signals to cue it. That inevitably results in buffering, or inaccurate splicing, causing the ad content to overrun the return to live content: in short, not a broadcast experience. It is obvious to the streaming viewer that they are not receiving the broadcast feed, so inevitably they feel cheated.

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Chief Technology Officer, STV

Because the Yospace system manages the content before encoding, it is completely seamless, and viewers have no idea that their content is being replaced.

"When we first demonstrated the Yospace solution to our senior executives, they did not believe that ads were being replaced," said Rémi Brunier, who is responsible for the STV Player product. "We had to set up a side-by-side demonstration with the broadcast feed to convince them that it was really happening."

This seamless switching also means that different outputs can be created for each stream, meaning that audiences can be targeted by platform and, ultimately, by individual demographics. The ability to target down to the individual is already available in the Yospace technology, and depends only on market requirements.

THE INSTALLATION

At STV, the broadcast contribution feed did not contain SCTE-35 markers. To address this issue

Yospace has installed a single 1U server for each of the STV regions, plus one for STV Glasgow (5 in total) in the main machine room which provides the encoding. Each server talks directly to the Grass Valley Colossus playout automation for timing of ad breaks and programmes. The video encoded with respect to these breaks is then pushed into Yospace's cloud distribution service. The servers, while operating within STV's facilities also push their own operating telemetry into Yospace's operations centre thus making them, logically speaking, part of Yospace's cloud service.

When the STV player plays the live stream (available on web, iOS, Android and Kindle Fire devices) through the Yospace distribution system, the signalled ad breaks cause the Yospace service to call out to Videoplaza for the replacement content for each user's stream. If there are not enough replacement ads to complete the break, Yospace automatically fills the time with branding messages, ensuring a seamless experience for viewers.

Yospace also provides cover when non-advertising content needs to be replaced. The online service provides local news for Aberdeen, Dundee, Edinburgh and Glasgow, for example, which are switched to online live streams as required. Some content cannot be streamed live – for example, some of the US-studios produced movies – and this is replaced on the service with marketing and branding content.

"It is a very simple set-up which did not require us to adapt anything in our existing set-up," said

Brunier. Alistair Brown added that "Yospace was virtually plug and play. The boxes arrived, we plugged them in and it worked." He also stated that as this was very much a trail-blazing solution, and certainly the first of its kind in the UK, there was a long period of careful and extensive trials before the service went live.

LAUNCH

"We wanted to launch registration for the STV Player, but we needed an appropriate moment for it, one where we could demonstrate real value for our audiences," said Brown. "The World Cup seemed like a good target for the launch of the new service, including registration, simulcast – the new STV Watch Live service – and dynamic ad replacement."

Given that this happened at the same time as a rebranding exercise and the launch of STV Glasgow, this was an ambitious decision. However, the trials had proved the concept and the technology.

"The World Cup was of course a massive test," said Andy Morris. "At times we had triple our forecast number of viewers, but the system scaled up without problems."

STV Watch Live is available in web browsers, and in Android, Kindle and iOS apps. Yospace supports interactive commercials, and many are now clickable for further information.

COMMERCIAL SUCCESS

"The proposition that Yospace offers is a new way of monetising content and delivering a new and innovative product for advertisers. This solution supports our content ambitions, because it brings in new revenues."

"From a commercial point of view, this brings broadcast transmission and digital targeting together," he continued. "It's very gratifying to offer a new and innovative service to our existing and new advertising partners"

Video on demand advertising is measured and sold as a cost per thousand impressions. With the Yospace solution, you know precisely how many viewers, on which platforms, have watched a specific spot. This means that Videoplaza can apply intelligence to the selection of commercials to viewers, ensuring that contractual terms are met.

The business analytics from Videoplaza and Yospace mean that STV can report precise numbers to the advertiser. The result is that STV can monetise live streams in a language and business model that makes sense to the advertiser, and in turn the advertiser can trust the reported viewing numbers.

"The World Cup was a massive test for the system," according to Morris. "We achieved a very high sell-through rate. The system delivered excellent yield and additional revenue for the business."

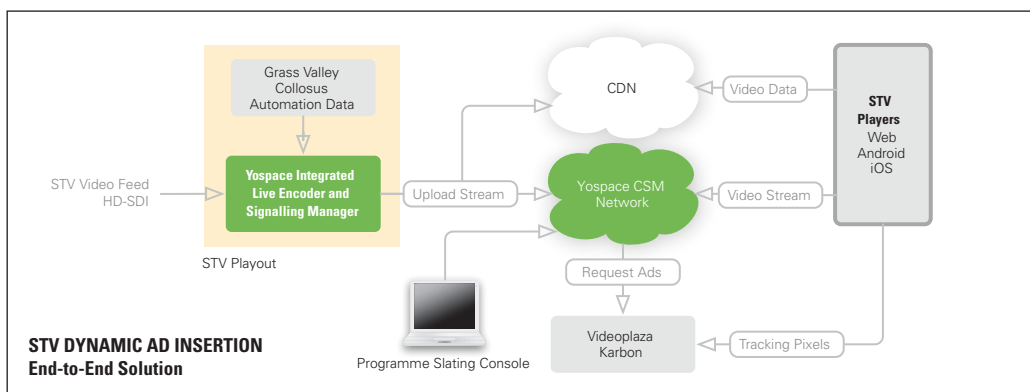
THE FUTURE

Commercials which have not passed through STV's quality control process need to be normalised to the standard output if they are to appear part of a seamless stream on the target device. Yospace provides this normalisation without the need for operator intervention.

Dynamic advertising insertion is now proven at STV. "The cost of deployment and integration was affordable, and operationally the Yospace system operates largely automatically, with a simple user interface for set-up," concluded CTO Alistair Brown.

"We have a platform which we know we can continue to develop, for instance to use more advertising intelligence to better serve our customers. STV is proud to be leading the way in realising real revenues from live streaming of broadcast content, meeting the expectations of both our viewers and our advertisers."

For more information, visit www.yospace.com



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